Unit in mm

TOSHIBA RECTIFIER MODULE SILICON DIFFUSED TYPE

30Q6P45, 30U6P45

THREE PHASE FULL WAVE BRIDGE APPLICATIONS

INVERTER EQUIPMENT FOR AC MOTOR CONTROL

CHOPPER EQUIPMENT FOR DC MOTOR CONTROL

DC SUPPLY FOR BATTERY

OTHER POWER CONVERSION EQUIPMENT

• Repetitive Peak Reverse Voltage : V_{RRM}=1200, 1600V

• Average Output Rectified Current: IO=30A

• Isolation Voltage : V_{Isol}=2500V AC 60s

• Single In-line Package

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Repetitive Peak	30Q6P45	VDDM	1200	V	
Reverse Voltage	30U6P45	$V_{ m RRM}$	1600		
Average Output Rectified Current		IO	30	Α	
Peak One Cycle Surge Forward Current (Non-Repetitive)		I_{FSM}	300 (50Hz)	A	
			330 (60Hz)		
Junction Temperature		T_{j}	-40~150	$^{\circ}\mathrm{C}$	
Storage Temperature		$\mathrm{T_{stg}}$	-40~125	$^{\circ}\mathrm{C}$	
Screw Torque	(Note 1)	_	1.5	Nm	
Isolation Voltage (AC, t=60s)		v_{Isol}	2500	V	

Note 1: Recommended torque 1.2Nm

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

				_ (
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT	
Repetitive Peak Reverse Current	IRRM (Note 2)	V _{RRM} =Rated	_	100	μ A	
Peak Forward Voltage	V _{FM} (Note 2)	$I_{ m FM}\!=\!30A$	_	1.3	V	
	R _{th (j-c)}	DC (Total) (Junction-Case)	_	0.8		
Thermal Resistance	R _{th (j-a)}	Free Convection (Junction-Ambient)	_	15	°C/W	

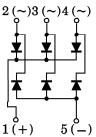
Note 2: A value per rectifier unit.

961001EAA2

Weight: 24g

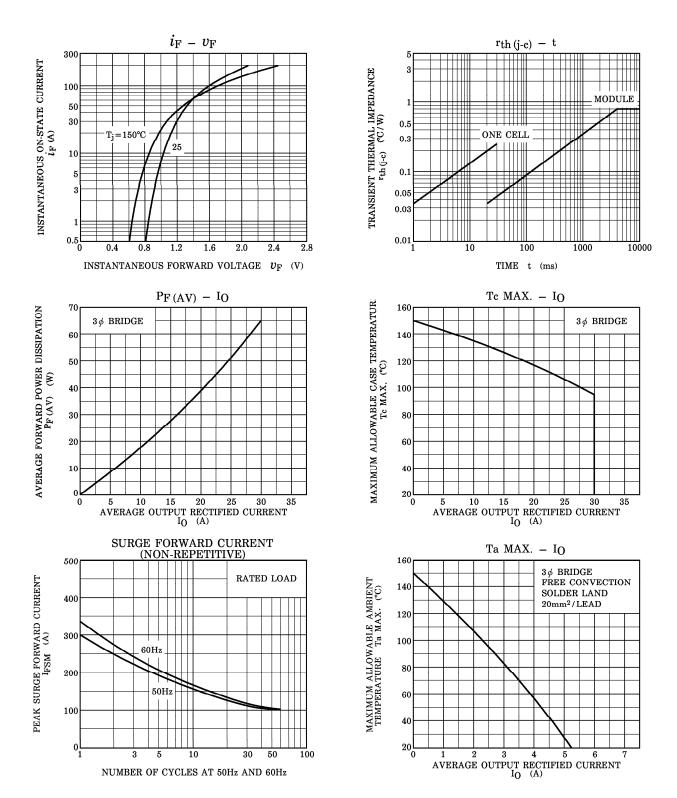
TOSHIBA

CONNECTION



12-46A1A

[■] TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.



961001EAA2

2/2

1996-12-02

The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
 The information contained herein is subject to change without notice.